

# Notice of Allowability

Application No.

10/530,607

Examiner

Lisa M. Solomon

Applicant(s)

OGATA ET AL.

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 4/7/2007.
2. ☒ The allowed claim(s) is/are 2,4-13,15-19,21-28 and 30-37.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
MATTHEW LUU  
PRIMARY EXAMINER

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 2, 4-13, 15-19, 21-28, and 30-37 are allowed.

The following is an examiner's statement of reasons for allowance: In regards to claims 2, 4-7, 9-13, 15, 23-24, 26-28, 31, and 33-35 these claims are still allowable for the reasons set out in the previous office action.

In regards to claims 8 and 16-19, the prior art does not disclose or suggest the claimed “the pressure absorbing surface is divided into a central portion and two end portions on both sides of the central portion along the predetermined direction, and an average thickness of the pressure absorbing member at the central portion is larger than an average thickness of the pressure absorbing member at the end portions” and “A line type recording head comprising a recording head” as claimed in combination with the remaining claim limitations.

In regards to claims 21-22 and 25, the prior art does not disclose or suggest claimed “at least a portion of wall surfaces forming the pressure-applied chambers has a rigidity lower than the other wall surfaces to form a vibration plate of the pressure converting means, and both the vibration plate and the damper surface are formed by a common first layer” in combination with the remaining claim limitations.

In regards to claims 30, 32, and 36-37, the prior art does not disclose or suggest the claimed “wherein the thin portions are arranged in vicinities of a portion of the free vibration surface where a width of the free vibration surface along a direction perpendicular to the predetermined direction narrows compared to other portions” and

the claimed "a member forming the free vibration surface has a stacked structure made up of a plurality of stacked layers" in combination with the remaining claim limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

2. Applicant's arguments, see page 2 paragraph 2, filed April 7, 2007 with respect to the drawings have been fully considered and are persuasive. The objection of the drawings has been withdrawn.

Applicant's arguments, see page 2 paragraph 3, filed April 7, 2007 with respect to claims 18-19, 28, and 37 have been fully considered and are persuasive. The objection of claims 18-19, 28 and 37 has been withdrawn.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Solomon whose telephone number is (571) 272-1701. The examiner can normally be reached on Monday - Friday from 8:00 am - 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2861

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Lisa M. Solomon  
Patent Examiner  
5/15/2007



MATTHEW LUU  
PRIMARY EXAMINER